

BMP Guidelines for Grant and Loan Eligibility

Nonpoint Category: Agriculture				
BMP	NRCS FOTG	Aquatic Habitat Guidelines	WSU BMP	CZARA 6217 Management Measures
Farm planning (NOT A BMP)				
Site specific plan and design (NOT A BMP)				
Fencing Definition A constructed barrier to livestock, wildlife or people.	FOTG 382 FENCE PURPOSE This practice may be applied as part of a resource management system to: <ul style="list-style-type: none"> Facilitate the application of conservation practices that treat the soil, water, air, plant, animal, and human resource concerns. 			Agriculture II.E.5.k See FOTG 582
Stream Crossing Definition A stabilized area to provide access across a stream for livestock and farm machines. Bridges are included in this BMP				Agriculture II.E.5.m See FOTG
Nose pumps and other watering devices	see FOTG 614			
Power supply to watering devices				
Conveyance Ditch and Canal Lining, Plain Concrete	FOTG 428A IRRIGATION WATER			Agriculture II.F.5.g

Definition: A fixed lining of impervious material installed in an existing or newly constructed irrigation field ditch or irrigation canal or lateral.	Purpose <ul style="list-style-type: none">• Improve management of irrigation water• Prevent waterlogging of land• Maintain water quality• Reduce water loss			See FOTG 388
Water Wells Definition A hole drilled, dug, driven, bored, jetted or otherwise constructed to an aquifer.	FOTG 642 WATER WELL PURPOSE This practice may be applied as part of a resource management system to support the following purpose: <ul style="list-style-type: none">• To provide water for livestock, wildlife, irrigation, human, and other uses.• To provide for general water needs of farming/ranching operations.• To facilitate proper use of vegetation on rangeland, pastures, and wildlife areas.			Agriculture II.E.5.i See FOTG 642
Water Gaps	* see FOTG 382			
Watering Facility Definition A device (tank, trough, or other watertight container) for providing animal access to water.	FOTG 614 Watering Facility PURPOSE To provide watering facilities for livestock and/or wildlife at selected locations in order to: <ul style="list-style-type: none">• Protect and enhance vegetative cover through proper distribution of grazing;			Agriculture II.E.5.h See FOTG 614

	<ul style="list-style-type: none">• Provide erosion control through better grassland management; or _ protect streams, ponds and water supplies from contamination by providing alternative access to water.			
Pipelines	FOTG 516 Pipeline Purpose Pipelines are installed for conveying water away from streams			Agriculture II.E.5.f See FOTG 516
Irrigation Water Management Definition Irrigation water management is the process of determining and controlling the volume, frequency, and application rate of irrigation water in a planned, efficient manner.	FOTG 449 Irrigation Water Management PURPOSE This practice is applied as part of a resource management system to support one or more of the following: <ul style="list-style-type: none">• Manage soil moisture to promote desired crop response• Optimize use of available water supplies• Minimize irrigation induced soil erosion• Decrease non-point source pollution of surface and groundwater resources• Manage salts in the crop root zone• Manage air, soil, or plant			Agriculture II.F.5.a See FOTG 449

	micro-climate.			
Irrigation Systems Definition A planned irrigation system in which all facilities utilized for the collection, storage, and transportation of irrigation tailwater for reuse have been installed	FOTG 447 IRRIGATION SYSTEM, TAILWATER RECOVERY PURPOSE This practice may be applied as part of a conservation management system to support one or more of the following: <ul style="list-style-type: none">• Conserve irrigation water supplies• Improve offsite water quality		WSU Publication PNW 0287	Agriculture II.F.5.i See FOTG 447
Soil Stabilizers Definition Erosion control through application of watersoluble anionic polyacrylamide (PAM).	FOTG 450 Use of ANIONIC POLYACRYLAMIDE (PAM) EROSION CONTROL PURPOSE This practice is applied as part of a conservation management system to support one or more of the following: <ul style="list-style-type: none">• Minimize or control irrigation-induced soil erosion.• Reduce wind and/or precipitation erosion.			

<p>Critical area Planting</p> <p>Definition Establishing permanent vegetation on sites that have or are expected to have high erosion rates, and on sites that have physical, chemical or biological conditions that prevent the establishment of vegetation with normal practices.</p>	<p>FOTG 342 CRITICAL AREA PLANTING</p> <p>PURPOSE</p> <ul style="list-style-type: none"> • Stabilize areas with existing or expected high rates of soil erosion by water. • Stabilize areas with existing or expected high rates of soil erosion by wind. • Restore degraded sites that cannot be stabilized through normal methods. 	See AHG Chapter 6-133		<p>Agriculture II.A.5.g</p> <p>See FOTG 342</p>
<p>Diversions</p> <p>A channel constructed across the slope generally with a supporting ridge on the lower side.</p>	<p>FOTG 362 DIVERSION</p> <p>PURPOSE This practice may be applied as part of a resource management system to support one or more of the following purposes.</p> <ul style="list-style-type: none"> • Break up concentrations of water on long slopes, on undulating land surfaces, and on land that is generally considered too flat or irregular for terracing. • Divert water away from farmsteads, agricultural waste systems, and other improvements. • Collect or direct water for water-spreading or water-harvesting systems. • Increase or decrease the drainage area above ponds. 	Not listed as a AHG Technique		<p>Agriculture II.A.5.j</p> <p>See FOTG 362</p>

	<ul style="list-style-type: none">• Protect terrace systems by diverting water from the top terrace where topography, land use, or land ownership prevents terracing the land above.• Intercept surface and shallow subsurface flow.• Reduce runoff damages from upland runoff.• Reduce erosion and runoff on urban or developing areas and at construction or mining sites.• Divert water away from active gullies or critically eroding areas.• Supplement water management on conservation cropping or stripcropping systems.			
Fencing on Public Property*				
Acquisition/installation of fencing along stream	(see FOTG 382, as long as it fulfills purpose)			
Installation of fencing off stream*	(see FOTG 382, as long as it fulfills purpose)			
Acquisition/installation of side fencing	(see FOTG 382, as long as it fulfills purpose)			

Nonpoint Category: Forest Practices				
BMP	NRCS FOTG	Aquatic Habitat Guidelines	WSU BMP	CZARA 6217 Management Measures
Critical area Planting Definition Establishing permanent vegetation on sites that have or are expected to have high erosion rates, and on sites that have physical, chemical or biological conditions that prevent the establishment of vegetation with normal practices.	FOTG 342 CRITICAL AREA PLANTING PURPOSE <ul style="list-style-type: none"> Stabilize areas with existing or expected high rates of soil erosion by water. Stabilize areas with existing or expected high rates of soil erosion by wind. Restore degraded sites that cannot be stabilized through normal methods. 	See AHG Chapter 6-133		
Sediment control basin Definition A basin constructed to collect and store debris or sediment.	SEDIMENT CONTROL BASIN FOTG 350 PURPOSE <ul style="list-style-type: none"> Preserve the capacity of reservoirs, wetlands, ditches, canals, diversion, waterways, and streams Prevent undesirable deposition on bottom lands and developed areas Trap sediment originating from construction sites or other disturbed areas Reduce or abate pollution by providing basins for deposition and storage of silt, sand, gravel, stone, agricultural waste solids, and 	Not listed as a AHG Technique	WSU Publication EB 1109	Agriculture II.A.5.p See FOTG 350

	other detritus			
Channel revegetation Definition Establishing and maintaining vegetative cover on channel banks, berms, spoil, and	FOTG 322 CHANNEL BANK VEGETATION Purpose <ul style="list-style-type: none"> Stabilize channel banks and adjacent areas and reduce erosion and sedimentation. Maintain or enhance the quality of the environment, including visual aspects and fish and wildlife habitat. 			
Tree/shrub Revegetation Definition Establishing woody plants by planting seedlings or cuttings, direct seeding, or natural regeneration.	FOTG 612 TREE /SHRUB ESTABLISHMENT PURPOSE This practice may be applied as part of a resource management system to support the following: <ul style="list-style-type: none"> To establish woody plants for forest products, wildlife habitat, long-term erosion control and improvement of water quality, treat waste, reduction of air pollution, sequestration of carbon, energy conservation, and enhance aesthetics. 			
Stream Habitat Improvement Maintain, improve, or restore physical, chemical, and biological functions of a stream.	FOTG 395 STREAM HABITAT IMPROVEMENT AND MANAGEMENT			

	PURPOSES This practice may be applied as part of a resource management system to support the following purposes: <ul style="list-style-type: none"> • Provide suitable habitat for desired aquatic species and diverse aquatic communities • Provide channel morphology and associated riparian characteristics important to desired aquatic species • Provide aesthetic values and recreation opportunities associated with stream habitats such as angling and fish viewing 			
Planting trees for future harvesting*	Not listed as a FOTG	Not listed as a AHG Technique		
Maintaining riparian plantings	see FOTG 612 & 322			
Channel realignment Definition The alteration of channel profile, planform, , pattern, cross section, bed elevation, and/or channel location.		See Chapter 6-189 The purpose of channel modification is to restore or create an equilibrium condition in the stream reach.		
Channelization	Not listed as a FOTG	Not listed as a AHG Technique		

Nonpoint Category: Urban/Rural				
BMP	NRCS FOTG	Aquatic Habitat Guidelines	WSU BMP	CZARA 6217 Management Measures
Septic system surveys			WSU Publication EB 1671	
Septic system repair/replacement*				
Community systems: planning, design and construction				
System testing (dye tests) (NOT A BMP)				
OSSS O and M programs			WSU Publication EB0707	Urban Areas VB.4.a .b .h
Individual Residential storm water infiltration treatment and collection systems (eg, rain gardens, biofiltration swales) on private property				
Individual residential rain gardens and biofiltration swales as part of riparian restoration projects				

Nonpoint Category: Habitat Alteration				
BMP	NRCS FOTG	Aquatic Habitat Guidelines	WSU BMP	CZARA 6217 Management Measures
Streambank Protection DEFINITION Treatment(s) used to stabilize and protect banks of streams or constructed channels, and shorelines of lakes, reservoirs, or estuaries.	FOTG 580 STREAMBANK AND SHORELINE PROTECTION PURPOSE <ul style="list-style-type: none"> To prevent the loss of land or damage to land uses, or other facilities adjacent to the banks, including the protection of known historical, archeological, and traditional cultural properties. To maintain the flow or storage capacity of the water body or to reduce the offsite or downstream effects of sediment resulting from bank erosion. To improve or enhance the stream corridor for fish and wildlife habitat, aesthetics, recreation. 	See Chapter 6 of AHG Flow-redirection techniques Structural techniques Biotechnical techniques		

Channel Stabilization DEFINITION Measure(s) used to stabilize the bed or bottom of a channel	FOTG 584 CHANNEL STABILIZATION PURPOSE This practice may be applied as part of a conservation management system to support one or more of the following: <ul style="list-style-type: none"> • Maintain or alter channel bed elevation or gradient • Modify sediment transport or deposition • Manage surface water and ground water levels in floodplains, riparian areas, and wetlands. 	See Chapter 6 of AHG Flow-redirection techniques Structural techniques Biotechnical techniques		
Installation of rip rap Definition Riprap is a type of bank armoring consisting of rock, typically bedded upon a filter layer of gravel or synthetic fabric.		Chapter 6-67 Riprap APPLICATION Riprap is typically used in bank protection and reinforcement of new stream alignments.		
Channel modification Definition The alteration of channel profile, pattern, cross section, bed elevation, etc.	Not listed as a FOTG	Chapter 6-189 Channel modification APPLICATION Channel modification techniques can be used at a site to alleviate bank –erosion problems. Modifications include restoring previously straightened stream reach to its historic planform, and profile.		

Armoring of the toe* Definition The toe refers to that portion of the streambank that extends from the channel bottom up to the lower limit of vegetation.		Chapter 6-79. LOG TOES APPLICATION Log toes play an important role in bioengineered approaches to streambank protection and in reshaped banks		Streambank and Shoreline Erosion IV. A.4.c Toe Protection
Installation of log structures Definition Engineered log jams are collections of large woody debris that redirect flow and provide stability to a streambank.	See FOTG 584	Chapter 6-31 Engineered Log Jams APPLICATION Engineered log jams are used to realign a channel or redirect flow away from a streambank to protect it from erosional forces.		
Installation of root wads	see FOTG 322	See Chapter 6-79		
Riparian Buffers Definition Riparian refers to that area to a river or stream that is linked to the moisture regime of the streamside environment Buffers are: An area of predominantly trees and/or shrubs located adjacent to and up-gradient from watercourses or water bodies.	FOTG 391 Riparian Forest Buffers PURPOSES <ul style="list-style-type: none"> • Create shade to lower water temperatures to improve habitat for aquatic organisms. • Provide a source of detritus and large woody debris for aquatic and terrestrial organisms. • Create wildlife habitat and establish wildlife corridors. • Reduce excess amounts of sediment, organic material, nutrients and pesticides in surface runoff and reduce 	Chapter 6-201 Riparian Buffer Management APPLICATION Buffers are a primary technique of bank stabilization , provide for wood recruitment, slow down flow, reduce sheer, and temperature improvement		

	<p>excess nutrients and other chemicals in shallow ground water flow.</p> <ul style="list-style-type: none"> • Provide a harvestable crop of timber, fiber, forage, fruit, or other crops consistent with other intended purposes. • Provide protection against scour erosion within the floodplain. • Restore natural riparian plant communities. • Moderate winter temperatures to reduce freezing of aquatic over-wintering habitats. • To increase carbon storage. 			
<p>Herbaceous cover</p> <p>Definition Herbaceous cover is a bank stabilization technique that consists of planted or installed herbaceous vegetation.</p> <p>Riparian herbaceous cover consists of grasses, grasslike plants, and forbs.</p>	<p>FOTG 390 RIPARIAN HERBACEOUS COVER</p> <p>PURPOSE This practice may be applied as part of a resource management system to support the following purposes:</p> <ul style="list-style-type: none"> • Riparian areas provide habitat (food, shelter, and water) for aquatic and terrestrial organisms. • Intercept direct solar radiation, create shade, and increase the depth to width ratio to help maintain or restore suitable water 	<p>Chapter 6-133 Herbaceous Cover</p> <p>APPLICATION A typical application as a stand alone treatment is on a streambank that has a relatively stable toe but has poor vegetation cover and possibly some surficial erosion.</p>		

	<p>temperatures for fish and other aquatic organisms while providing a milder microclimate for wildlife.</p> <ul style="list-style-type: none">• Improve and protect water quality by reducing the amount of sediment and other pollutants, such as pesticides, organic, and nutrients in surface runoff as well as nutrients and chemicals in shallow ground water flow..• Help stabilize the channel bed and streambank.• To serve as corridors to provide landscape linkages between existing habitats.• Provide room for watercourses to establish geomorphic stability.• To manage existing riparian herbaceous habitat to improve or maintain desired plant communities.			
Road management and abandonment plans (RMAPs) (NOT A BMP)	*not listed in NRCS FOTGs	Not listed in the AHGs		
Grass buffer strips Definition Permanent strips of grass or grass-legume mixtures arranged as nearly as possible on the contour, placed on the most erodible	FOTG 741 GRASS BUFFER STRIPS PURPOSES This practice may be applied as part of a resource management system to support the following			

segment(s) of the field.	purposes: <ul style="list-style-type: none"> • Reduce sheet and rill erosion • Reduce transport of sediment and other water-borne contaminants down-slope, on-site or off-site • Enhance upland wildlife habitat 			
Development of easement agreement (NOT A BMP)				
Site monitoring & and follow-up maintenance	(Part of most FOTGs and BMPs)			
Site preparation work (eg, blackberry removal)	(Part of most FOTGs and BMPs)			
Lakeshore riparian installation	*			
Wetland restoration Definition A rehabilitation of a drained or degraded wetland where the soils, hydrology, vegetative community, and biological habitat are returned to the natural condition to the extent practicable.	FOTG 657 Wetland Restoration PURPOSE This practice may be applied as part of a resource management system to support the following purpose: <ul style="list-style-type: none"> • To restore hydric soil conditions, • hydrologic conditions, • hydrophytic plant communities, • wetland functions that occurred on the disturbed wetland site prior to modification to the extent practicable. 			
Creating wetlands	FOTG 658 Wetland Creation			

Definition A wetland that has been created on a site location which historically was not a wetland or is a wetland but the site will be converted to a wetland with a different hydrology, vegetation type, or function than naturally occurred on the site.	PURPOSE This practice may be applied as part of a resource management system to support the following purpose: <ul style="list-style-type: none">• To create wetlands that have wetland hydrology, hydrophytic plant communities, hydric soil conditions, and wetland functions and/or values.			
Land acquisition for wetlands protection, restoration, construction				

Nonpoint Category: Recreation				
BMP	NRCS FOTG	Aquatic Habitat Guidelines	WSU BMP	CZARA 6217 Management Measures
Marina Pumpouts Definition A station where boat sewage can be pumped and stored to reduce the release of sewage to surface waters.				Marinas and Boats II.G.4. a. pump out maintenance b. pump out inspections
Pumpout Signage Definition Signs explaining the availability and use of pumpout facilities.				Marinas and Boats II.G.4.d and Marinas and Boats III.F.4.a
Fish Waste Management Definition Promote sound fish waste management through a combination of fish-cleaning restrictions, public education, and proper disposal of fish waste.				Marinas and Boats III.B.4. c. Educate boaters d. Implement fish composting where appropriate
Sediment Basin DEFINITION A basin constructed to collect and store debris	FOTG 350 SEDIMENT BASIN PURPOSE <ul style="list-style-type: none"> • Preserve the capacity of reservoirs, wetlands, ditches, canals, diversion, waterways, and streams • Prevent undesirable deposition on bottom lands and developed areas 			

	<ul style="list-style-type: none">• Trap sediment originating from construction sites or other disturbed areas• Reduce or abate pollution by providing basins for deposition and storage of silt, sand, gravel, stone, agricultural waste solids, and other detritus			
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Nonpoint Category: Other				
BMP	NRCS FOTG	Aquatic Habitat Guidelines	WSU BMP	CZARA 6217 Management Measures
Education, outreach, information signage				
Pledge programs				
School programs				
Impact studies				
Set up of local loan funds by recipients				
Septage treatment				